

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (currently amended): A power-saving method for a station used in a WLAN, an access point sending a plurality of fragments to the station during an interval which is between a first beacon and a second beacon adjacent to the first beacon, the station receiving the plurality of fragments at different time points after receiving the first beacon, the power-saving method comprising:

the access point receiving a first fragment to be delivered to the station;

10 the access point immediately delivering the first fragment to the station in response to the access point receiving the first fragment;

if a period between the first beacon and a second fragment of the plurality of fragments received by the station after the first beacon is smaller than a predetermined time, setting a MORE DATA BIT as enabled and the station is 15 in an active mode; and

if a period between the first beacon and a second fragment of the plurality of fragments received by the station after the first beacon is not smaller than a predetermined time, setting the MORE DATA BIT as disabled and the station is in a power saving mode.

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2 (original): The power-saving method of the claim 1 further comprising informing the access point that the station is in the power saving mode.

3 (original): The power-saving method of the claim 1 further comprising the access point 25 delivering a traffic indication to the station through the first beacon.

4 (original): The power-saving method of the claim 1 further comprising the station

delivering a PS-Poll control packet to the access point.

5 (original): The power-saving method of the claim 4 further comprising the access point recognizing the PS-Poll control packet and sending a buffer packet to the station.

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6 (original): The power-saving method of the claim 1 further comprising dividing a packet into the plurality of fragments.

7 (original): The power-saving method of the claim 6 further comprising sending the

10 plurality of fragments to a single-packet MAC buffer.

8 (original): The power-saving method of the claim 7 further comprising sending the plurality of fragments to a WLAN from the single-packet MAC buffer.

15 9 (original): The power-saving method of the claim 1 wherein the plurality of fragments comprises sound information.

10 (original): The power-saving method of the claim 1 wherein the wireless communication system is wireless IP phone.

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11 (original): The power-saving method of the claim 1 wherein a ratio of the predetermined time to the interval between the first beacon and the second beacon is between 0 and 1 inclusive.

25 12 (currently amended): A wireless communication system with a power-saving function, the wireless communication system comprising:
an access point for sending a plurality of periodic beacons and sending a plurality of fragments during an interval between a first beacon and a second beacon

adjacent to the first beacon, the first beacon comprising a traffic indication,
wherein the access point delivers a first fragment to the station immediately
after receiving the first fragment; and

5 a station for receiving the first beacon and receiving the plurality of fragments at
different time points after the first beacon is received, the station comprising:
a processor for setting a MORE DATA BIT as enabled and the station is in an
active mode if a period between the first beacon and a second fragment
of the plurality of fragments received by the station after the first beacon
is smaller than a predetermined time, and setting a MORE DATA BIT as
disabled and the station is in a power saving mode if a period between
the first beacon and a second fragment of the plurality of fragments
received by the station after the first beacon is not smaller than the
predetermined time.

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15 13 (original): The wireless communication system of the claim 12 wherein the station
further comprises a transmitter for sending a PS-Poll control packet to the access
point.

20 14 (original): The wireless communication system of the claim 13 wherein the access
point further comprises a logic unit for recognizing the PS-Poll control packet.

15 (original): The wireless communication system of the claim 13 wherein the access
point is further used for sending a buffer packet.

25 16 (original): The wireless communication system of the claim 12 wherein the access
point further comprises a packet division unit for dividing a packet into a plurality
of fragments.

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17 (original): The wireless communication system of the claim 16 wherein the access point further comprises a single-packet MAC buffer for storing the plurality of fragments.

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